

# **OPERATING INSTRUCTIONS FOR Uniprep4 Tool 63mm to 225mm**

- 1. Machine to be operated by trained personnel.**
- 2. Instructions to be read before use.**

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## Specifications.

Materials: Mild Steel EN3A, Stainless steel, Aluminum, Brass & Tungsten Carbide

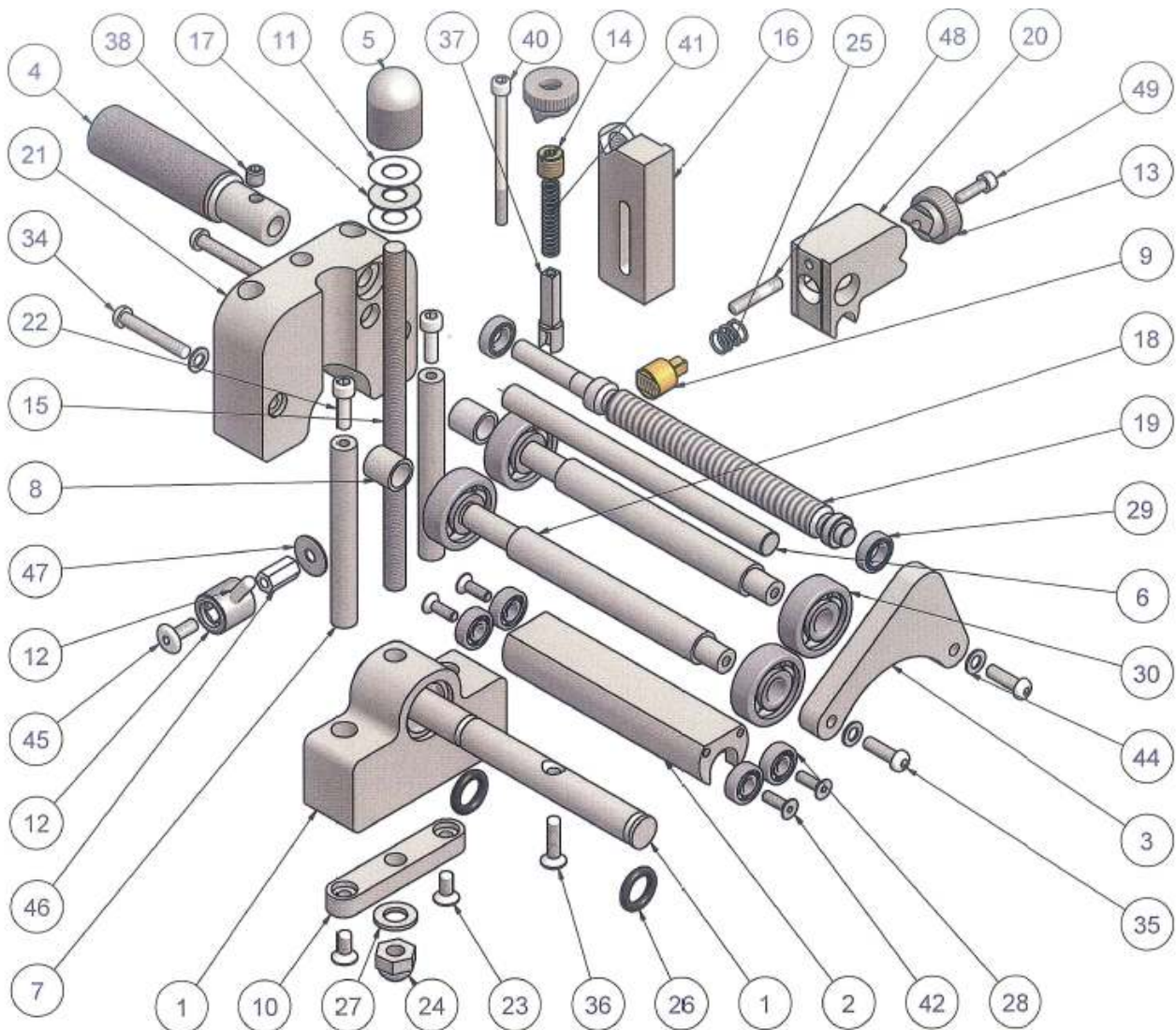
Finish: Natural / Zinc passivate to mild steel

Dimensions: L320 x W130 x H220 mm

Depth of cut: 0.30 mm.

Max: length of scrape 140mm, Feed per rotation 4.5mm

**Weight:** **Excluding tool box 4.0 Kg**  
**Including tool box 6.0 Kg**



## Uniprep 63-225 Parts List

Number	Product Code	Description
1	Z01-02-316	63-225 underarm block
2	Z01-02-314	63-225 undercarriage
3	Z01-02-304	63-225 boomerang end plate
4	Z01-02-311	63-225 drive handle
5	Z01-02-310	63-225 underarm knurled control knob
6	Z01-02-305	63-225 stabilizer shaft
7	Z01-02-307	63-225 underarm block slide shafts
8	Z01-02-303	63-225 axel shaft bearing spacer
9	Z01-02-313	63-225 drive button QR
10	Z01-02-308	63-225 slide shaft bottom plate
11	Z256-A011-018	Thrust race washer
12	Z01-02-010	Positioning thumbscrew c/w lever
13	Z01-02-011	Spring tension thumbscrew 'v'
14	Z01-02-012	Pressure spring grubscrew
15	Z183-T006-222	10mm x 190 st/st threaded bar
16	Z01-02-312	63-225 toolpost cartridge only
17	Z256-A011-017	Thrust race bearing
18	Z01-02-302	63-225 axel shaft
19	Z01-02-306	63-225 feedscrew
20	Z01-02-309	63-225 toolpost carriage casting only
21	Z01-02-301	63-225 preptool body casting only
22	Z183-T006-143	Screw M6 x 25 skt cap
23	Z183-T006-157	Screw M6 x 20 c/s skt
24	Z183-T006-213	Dome nut M10
25	Z01-02-019	Drive button spring (short)
26	Z256-A011-019	o' ring 14 x 4mm
27	Z183-T006-214	Washer M10
28	Z256-A011-004	Undercarriage bearing 606zz
29	Z256-A011-003	Feedscrew body & boomerang bearing 618 2 RS
30	Z256-A008-014	Axel bearing 6301zz
34	Z183-T006-166	Screw M6 x 40 skt button
35	Z183-T006-158	Screw M6 x 20 skt button
36	Z183-T006-161	Screw M6 x 25 c/s skt
37	01-07-042	Single edge tip (exp)
37	01-07-043	Single edge tip (UK)
38	Z183-T006-207	Grubscrew M8 x 6
40	Z183-T006-138	Screw M5 x 70 skt cap
41	Z01-02-021	Pressure spring (long)
42	Z183-T006-130	Screw M5 x 16 c/s skt
44	Z183-T006-144	Washer M6 std
45	Z183-C048-001	Screw furniture type M6 x 16
46	Z183-T006-146	Rod connector M6
47	Z183-T006-159	Washer M6x20x1
48	Z183-T006-164	Studding M6 x 35
49	Z183-T006-132	Screw M5 x 20 skt cap

This unit is design and manufactured to meet the requirements of National Grid Gas Industry Standards GIS/PL2-5:2006 Part 5: Electrofusion ancillary tooling.

Hy-Ram Engineering Co Ltd has a policy of continuous improvement in product quality and design. Hy-Ram Engineering Co Ltd therefore reserves the right to change the specification of its models at any time, without prior notice.

**It is the responsibility of the operator to ensure that the PE pipe is suitable for pipe preparation if in doubt contact the PE pipe manufacturer for confirmation**

### **Important!**

This manual outlines the operation of the pipe surface preparation tooling for the scraping of PE pipe prior to the electrofusion welding process.

This manual forms a part of the product to which it relates. It should be kept for the life of the product. Any amendments issued by Hy-Ram Engineering Co Ltd should be incorporated in the text. The manual should be passed to any subsequent holder or user of this product.

### **General Description.**

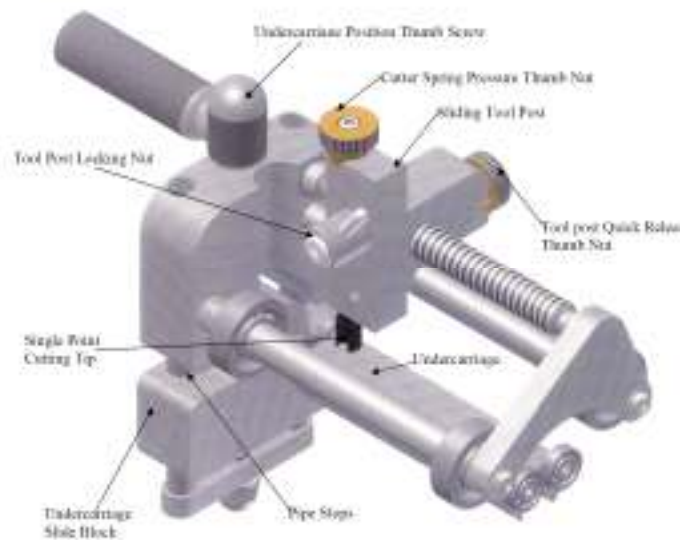
The pipe preparation tool is designed to provide a fusible surface on any polyethylene pipe material (new, weathered or previously installed).

### **Before using**

It is important to ensure all component parts are present and in serviceable condition. In addition, the condition of the cutting / peeling tip should be checked for damage or excessive wearing.

### **Safety Instructions**

1. Read the instruction booklet before using the tool.
2. It is imperative that all possible precautions are made to avoid unexpected pipe movement when the tool is being use.
3. Never use the tool on pipes that are not within the specified dimensions.
4. The tool tip holder spring tension is factory set and **MUST NOT** be tampered without adequate training or instruction.
5. Operatives should wear eye protection, gloves, safety headwear & footwear when using the equipment.
6. A single scrape / pass cannot be guaranteed to provide 100% preparation, where this is required users are advised to consider making 2 scrapes around the pipe.



### **Instructions for use.**

- 1. Ensure that the pipe end is cut square, is free of burrs and the section to be scraped does not have any deep scores.**
- 2. Mark the pipe outer wall at a point 50% of the length of the coupler plus 25mm.**
- 3. Release the tool post by loosening the tool post locking screw, position the tool post furthest away from the undercarriage and temporarily retighten.**
- 4. Position the scraper onto the pipe with the tool resting on the axle wheels**
- 5. Fix the tool in its operating position by fully loosening the under arm pressure screw, then push the underarm inward to release the ladder pin from the main body ladder and the upwards until the wheels of the undercarriage are near to the inner wall of the pipe. Releasing pressure on the underarm allows the ladder pin to locate back into the main body ladder. Fixing of the tool is completed by screwing inwards the underarm pressure screw, until the wheels on the undercarriage are in firm contact with the inner wall of the pipe.**
- 6. Slowly rotate the scraper around the pipe 2 or 3 times to ensure that it is positioned correctly adjusting the underarm pressure screw to ensure ease of rotation.**
- 7. Quarter turn the quick release thumb wheel (see reverse view) to allow the tool post to move freely along the feed screw. Remove the protection cap from the cutter above the mark on the pipe (see 2) a further quarter turn of the thumbwheel will engage the feed screw-drive.**
- 8. Quarter turn the cutter spring thumb wheel to disengage pressure on the cutter. Release the tool post locking screw slide the tool post down until the cutter is 1-2mm from the pipe wall, and screw in the tool post locking screw to fix the tool post in its correct operating position. Re-engage the pressure on the cutter by a further quarter turn of the cutter spring thumb wheel. The cutter should now be touching the pipe wall surface.**
- 9. Rotate the scraping tool around the pipe in a steady clockwise direction. The cutter will travel towards the pipe end removing a continuous strip of PE the process may be halted from time to time to remove surplus peel.**

## **Instructions for removal after completion of pipe preparation.**

- 1) On completion, the scraped section should be inspected for areas of un-scraped pipe. If necessary the pipe can be scraped again.
- 2) To remove the scraper, loosen the tool post locking screw and raise the tool post clear of the pipe and retighten. Loosen the underarm pressure screw to release the undercarriage wheels and remove the scraper from the pipe. Refit the protective cover to the cutter tip.

### Storage

#### **IMPORTANT: When not in use always –**

1. Store the tool in a tool box.
2. Ensure the tool tip tension is released.

#### **Maintenance**

Lubricate all moving parts at regular intervals.

### **Certificate of calibration.**

- This product has been inspected and tested in accordance with the ISO9001 quality control systems and procedures in place at Hy-Ram Engineering Co Ltd.
- This product has no calibration period, periodic, safety inspections should be carried out by the operator if in any doubt please contact the manufacturer for further information

### **Decommissioning & Disposal Instructions**

*These give the instructions for decommissioning and disposal of the equipment and confirm how it is to be taken out of service safely, in respect of the Essential Health and Safety Requirements.*

- If a Uniprep1 tool has reached the end of its useful working life and cannot be refurbished it must be disposed of through a licensed scrap or waste disposal facility. Alternatively, a reverse engineering company could be used to strip the equipment for recycling purposes.
- Disposal is the responsibility of the Customer this can also be achieved by returning the product back to the manufacturer.



## **Warranty Information.**

### **1. Extent of Warranty.**

- (a) Hy-Ram Engineering Co Ltd warrants to the end-user customer that its products will be free from defects in materials and workmanship, for six months after the date of purchase by the end-user customer, subject to providing proof of purchase.
- (b) If Hy-Ram Engineering Co Ltd receives, during the warranty period, notice of a defect in product which is covered by this warranty, Hy-Ram Engineering Co Ltd shall either repair or replace the product, at its option. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
- (c) All warranty work will be carried out by Hy-Ram Engineering Co Ltd unless otherwise agreed. On-site warranty and repair or replacement services are available from authorised Hy-Ram Engineering Co Ltd service facilities world-wide.
- (d) Customers shall prepay shipping charges for products returned to Hy-Ram Engineering Co Ltd for warranty service, and Hy-Ram Engineering Co Ltd will charge for return of the products back to the customer.
- (e) This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from country to country in the world.

### **Pre-conditions for Warranty Application.**

Hy-Ram Engineering Co Ltd' warranty covers only those defects which arise as a result of normal use of the product, and this warranty shall only apply in the following circumstances:

- (a) All the instructions contained in the operating manual have been complied with
- (b) And none of the following apply:
  - (i) Improper or inadequate maintenance;
  - (ii) Physical abuse;
  - (iii) Unauthorised modification, misuse or any use not in accordance with the operating manual and good industry practice;
  - (iv) Operation outside the products specifications;
  - (v) Improper site preparation or maintenance; and
  - (vi) Faulty pipe or fittings.

## Limitations of Warranty.

- (a) Hy-Ram Engineering Co Ltd does not warrant the operation of any product to be uninterrupted or error free.
- (b) Hy-Ram Engineering Co Ltd makes no other warranty of any kind, whether express or implied, with respect to its products. Hy-Ram Engineering Co Ltd specifically disclaims the implied warranties of satisfactory quality and fitness for a particular purpose.
- (c) To the extent that this warranty statement is inconsistent with the law of the locality where the customer uses the product, this warranty statement shall be deemed modified by the minimum necessary to be consistent with such local law.
- (d) To the extent allowed by local law, the remedies provided in this warranty statement are the customer's sole and exclusive remedies.
- (e) This tool has been designed for the range of fittings available at the time of its design and development. Hy-Ram Engineering Co Ltd can accept NO liability for the unit's ability or otherwise to work with new or different fittings that subsequently appear in the market place.

Please complete this information and keep it safely with your proof of purchase receipt. You will require it for any warranty claim.

Where purchased .....

Date of purchase .....

Name & address  
Of purchaser .....

.....

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Type of tool .....

Serial number .....

For Service and repair please contact:

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